

AMENDMENTS TO THE CLAIMS

Please cancel Claims 1-12, 14-25, and 27-38 without prejudice or disclaimer of the subject matter recited therein.

Please amend Claims 13, 26, and 39 as follows.

1-12 (Canceled)

13. (Currently Amended) A vibration correcting device ~~according to Claim 12,~~
comprising:

a lens unit having an optical axis;

a movable member holding said lens unit, which makes said lens unit movable within
a plane orthogonal to the optical axis;

a fixed member configured and positioned to limit the movement of said movable
member in the optical axis direction;

at least three balls disposed between said movable member and said fixed member,
which can roll between said movable member and said fixed member, and make relative
movements of said movable member and said fixed member possible;

a vibration detecting unit configured and positioned to detect vibration, which outputs
vibration information corresponding to the detected vibration;

a pitch direction drive unit configured and positioned to drive said movable member in
the pitch direction within the optical axis orthogonal plane and a yaw direction drive unit
configured and positioned to drive said movable member in the yaw direction within the optical
axis orthogonal plane in accordance with the vibration information from said vibration detecting
unit, which include drive magnets held by said

fixed member and yokes and coils held by said movable member, or include drive magnets held by said movable member and yokes and coils held by said fixed member; and

a pitch directional position detecting unit configured and positioned to detect the moving position of said movable member in the pitch direction and a yaw directional position detecting unit configured and positioned to detect the moving position of said movable member in the yaw direction, where the pitch detecting directional axis of said pitch directional position detecting unit and the yaw detecting directional axis of said yaw directional position detecting unit are substantially on and along the optical axis of said lens unit when said movable member is at a neutral position in the pitch direction and yaw direction,

wherein said pitch direction drive unit and said yaw direction drive unit press said movable member toward the fixed member side by means of magnetic pressing forces caused by magnetic attractive action between said drive magnets and yokes,

wherein ~~the~~ said pitch directional position detecting unit and said yaw directional position detecting unit have detecting magnets held by ~~the~~ said movable member and magnetic resistance effective elements which are disposed and fixed to said detecting magnets at predetermined intervals and detect changes in magnetic flux density due to movement of said detecting magnets, and wherein magnetic fluxes ~~with respect to the~~ from said detecting magnets pass through the yokes ~~of the movable member~~.

14-25 (Canceled)

26. (Currently Amended) A lens device ~~according to Claim 25, comprising:~~
a lens unit which is disposed inside said lens device and has an optical axis;
a movable member holding said lens unit, which makes said lens unit movable within
a plane orthogonal to the optical axis;
a fixed member configured and positioned to limit the movement of said movable
member in the optical axis direction;
at least three balls disposed between said movable member and said fixed member,
which can roll between said movable member and said fixed member and makes relative
movements of said movable member and said fixed member possible;
a vibration detecting unit configured and positioned to detect vibration, which outputs
vibration information corresponding to the detected vibration;
a pitch direction drive unit configured and positioned to drive said movable member in
the pitch direction within the optical axis orthogonal plane and a yaw direction drive unit
configured and positioned to drive said movable member in the yaw direction within the optical
axis orthogonal plane in accordance with the vibration information from said vibration detecting
unit, where said pitch direction drive unit and said yaw direction drive unit include drive magnets
held by said fixed member and yokes and coils held by said movable member, or include drive
magnets held by said movable member and yokes and coils held by said fixed member; and
a pitch directional position detecting unit configured and positioned to detect the
moving position of said movable member in the pitch direction and a yaw directional position
detecting unit configured and positioned to detect the moving position of said movable member
in the yaw direction, where the pitch detecting directional axis of said pitch directional position
detecting unit and the yaw detecting directional axis of said yaw directional position detecting

unit are substantially on and along the optical axis of said lens unit when said movable member is at a neutral position in the pitch direction and yaw direction.

wherein said pitch direction drive unit and said yaw direction drive unit press said movable member toward the fixed member side by means of magnetic pressing forces caused by the magnetic attractive action between said drive magnets and said yokes.

wherein ~~the~~ said pitch directional position detecting unit and said yaw directional position detecting unit have detecting magnets held by ~~the~~ said movable member and magnetic resistance effective elements which are disposed and fixed to said detecting magnets at predetermined intervals and detect changes in magnetic flux density due to movements of said detecting magnets, and wherein magnetic fluxes ~~with respect to the~~ from said detecting magnets are caused to pass through the yokes ~~of the movable member~~.

27-38 (Canceled)

39. (Currently Amended) An optical device ~~according to Claim 38;~~ with an imaging device for imaging a subject image formed by a lens device, comprising:

a lens unit which is disposed inside the lens device and has an optical axis;

a movable member holding said lens unit, which makes said lens unit movable within a plane orthogonal to the optical axis;

an image pickup device configured and positioned to image the subject image formed by the lens device;

a fixed member configured and positioned to limit the movement of said movable member in the optical axis direction;

at least three balls disposed between said movable member and said fixed member,
which can roll between said movable member and said fixed member and make relative
movements of said movable member and said fixed member possible;

a vibration detecting unit configured and positioned to detect vibration, which outputs
vibration information corresponding to the detected vibration;

a pitch direction drive unit configured and positioned to drive said movable member in
the pitch direction within the optical axis orthogonal plane and a yaw direction drive unit
configured and positioned to drive said movable member in the yaw direction within the optical
axis orthogonal plane in accordance with the vibration information from said vibration detecting
unit, where said pitch direction drive unit and said yaw direction drive unit include drive magnets
held by said fixed member and yokes and coils held by said movable member, or include drive
magnets held by said movable member and yokes and coils held by said fixed member; and

a pitch directional position detecting unit configured and positioned to detect the
moving position of said movable member in the pitch direction and a yaw directional position
detecting unit configured and positioned to detect the moving position of said movable member
in the yaw direction, where the pitch detecting directional axis of said pitch directional position
detecting unit and the yaw detecting directional axis of said yaw directional position detecting
unit are substantially on and along the optical axis of said lens unit when said movable member
is at a neutral position in the pitch direction and yaw direction,

wherein said pitch direction drive unit and said yaw direction drive unit press said
movable member toward said fixed member by means of magnetic pressing forces caused by
magnetic attractive action between said drive magnets and said yokes,

wherein ~~the~~ said pitch directional position detecting unit and said yaw directional position detecting unit have detecting magnets held by ~~the~~ said movable member and magnetic resistance effective elements which are disposed and fixed to said detecting magnets at predetermined intervals and detect changes in magnetic flux density due to the movement of said detecting magnets, and wherein magnetic fluxes ~~with respect to~~ from said detecting magnets pass through ~~the~~ said yokes ~~of the movable member~~.